



UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,909	07/08/2003	Juan Yu	9432-000239	7929

27572 7590 10/18/2005

HARNESSE, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

ZIA, SYED

ART UNIT PAPER NUMBER

2131

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/614,909	YU ET AL.	
	Examiner	Art Unit	
	Syed Zia	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-12 and 14-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to amendment filed on July 19, 2005. Original application contained Claims 1-36. Applicant currently amended Claims 1, 7, 14, 16, and cancelled claim 13. Applicant amendment filed on July 19, 2005 have been entered and made of record. Therefore, presently pending claims are 1-12, and 14-36.

Claim Rejections - 35 USC § 112

Previous rejection under 35 USC § 112 second paragraph has been with drawn.

Response to Arguments

Applicant's arguments filed July 19, 2005 have been fully considered but they are not persuasive because of the following reasons:

Regarding Claims 1, 8, and applicants argued that the cited prior art (CPA) [Birrell et al. (U.S. Patent No. 5,805,803) does not teach “*a method of directly sending messages between peer*”.

This is not found persuasive. The system of cited prior art Birrell teaches and describes a computer implemented Intranet resource accessing method that involves forwarding request for

Art Unit: 2131

resource to Intranet when token received from client computer is valid. The method involves receiving a request for a resource of an intranet in a first public message over the public network from a client computer. A token and the request for the resource in a first secure message is then received over the public network from the client computer. The request for the resource is forwarded to the intranet when the received token is valid to access selected Intranet resources from client computer connected to Internet.

Regarding Claims 1, 12-23, and 36 applicants argued that the cited prior art (CPA) [Nessett et al. (U.S. Patent No. 6,055,236)] does not teach “*making the protocol or communication data of the peers available through an internetwork*”.

This is not found persuasive. The system of cited prior art Nessett teaches and describes a method for locating network services on distributed address translation network that involves using digital certificate by external network device on internet to request desired service from LAN. A digital certificate is created on internal distributed address translation network, which is signed with a secured digital signature. The certificate is published in location on the address translation network accessible to external network devices on Internet, such that the certificate is used by external network device to request a desired service from LAN on the address translation network. The digital certificate includes global Internet protocol address for internal network device valid outside the address translation network, protocol service name, service parameters and optional public encryption key. The secured digital signature in the certificate is independently validated by external network device on Internet and is published for Internet

Therefore, the examiner asserts that the system of prior art teaches system and method of tunneling in a network using different protocols.

Applicants still have failed to explicitly identify specific claim limitations, which would define a patentable distinction over prior arts. The examiner is not trying to interpret the invention but is merely trying to interpret the claim language in its broadest and reasonable meaning. The examiner will not interpret to read narrowly the claim language to read exactly from the specification, but will interpret the claim language in the broadest reasonable interpretation in view of the specification. Therefore, the examiner asserts that the system of cited prior arts does teach or suggest the subject matter broadly recited in independent Claims, and in subsequent dependent Claims. Accordingly, rejections for claims 1-12, and 14-36 are respectfully maintained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8, 10, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Birrell et al. (U.S. Patent 5,805,803).

6. With respect to claim 1, Birrell et al. disclose a method for establishing communication in a network comprising:

determining communication data of a first network peer that is connected to a first network and that communicates with an internetwork through a first tunnel the communication data including an internetwork address and port for the first network peer to receive messages via the internetwork (column 3, line5 to col. 4 line 17: It is inherent that if a lookup service is able to communicate which protocol to use in communication with a network peer, that the protocol has been determined and registered with the lookup service.);

registering the communication data with a lookup service that is available through the internetwork (column 3, line5 to col. 4 line 17: It is inherent that if a lookup service is able to communicate which protocol to use in communication with a network peer, that the protocol has been determined and registered with the lookup service);

receiving a communication request from a second network peer that is connected to a second network and that communicated the lookup service through the internetwork (column 4, lines 5-12);

providing the communication data of the first peer to the second peer (column 4, lines 13-17), and

sending messages, according to the communication data, from the second network peer directly to the first network peer via the first tunnel (column 4, lines 47-49).

Art Unit: 2131

7. With respect to claim 2, Birrell et al. disclose a method wherein communication data further comprises at least one of a firewall restrictions and a tunnel protocol (column 4, lines 13-17).

8. With respect to claim 3, Birrell et al. disclose a method further comprising authenticating the communication request at the lookup service (column 2, lines 33-37).

9. With respect to claim 4, Birrell et al. disclose a method wherein the communication request includes a certificate indicative of the second peer (column 2, lines 37-41).

10. With respect to claim 5, Birrell et al. disclose a method wherein authenticating the communication request includes providing a tunnel identifier to the second network peer in response to the certificate (column 2, lines 49-55).

11. With respect to claim 6, Birrell et al. disclose a method further comprising creating a message queue for the first network peer (item 143: It is inherent in a proxy server to have a message cache or queue).

12. With respect to claim 7, Birrell et al. disclose a method further comprising adding the communication request to the message queue (item 143: A proxy server inherently intercepts messages.).

Art Unit: 2131

13. With respect to claim 8, Birrell et al. disclose a method wherein the message queue is a proxy queue (item 143).

14. With respect to claim 10, Birrell et al. disclose a method wherein creating the message queue includes creating the message queue at a location of the lookup service (item 143, Figure 1).

16. Claims 1, 12-23 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Nessett et al. (U.S. Patent 6,055,236).

17. With respect to claim 1, Nessett et al. disclose a method for establishing communication in a network comprising:

determining communication data of a first network peer that is connected to a first network and that communicates with an internetwork through a first tunnel the communication data including an internetwork address and port for the first network peer to receive messages via the internetwork (column 12, lines 67 to column 13, lines 1-7; column 15, lines 63-67);

registering the communication data with a lookup service that is available through the internetwork (column 12, lines 67 to column 13, lines 1-7);

receiving a communication request from a second network peer that is connected to a second network and that communicated the lookup service through the internetwork (column 26, lines 18-21; column 13, lines 54-57);

providing the communication data of the first peer to the second peer (column 23, lines 3-5; column 22, lines 42-51), and

sending messages, according to the communication data, from the second network peer directly to the first network peer via the first tunnel (column 23, lines 20-23).

18. With respect to claim 12, Nessett et al. disclose a method wherein the second network peer includes a second tunnel (column 4, lines 7-9).

20. With respect to claim 14, Nessett et al. disclose a method for dynamically selecting a tunnel protocol in a network comprising:

Determining protocol data of a first network peer that is connected to a first network and that communicates with an internetwork through first tunnel (column 12, lines 67 to column 13, lines 1-7; column 15, lines 63-67);

Registering the protocol data with a lookup service that is available through the internetwork(column 12, lines 67 to column 13, lines 1-7);

Receiving a communication request from a second network peer at the lookup service (column 26, lines 18-21; column 13, lines 54-57);

Providing the protocol data of the first peer to the second peer (column 23, lines 3-5; column 22, lines 42-51);

Selecting a tunnel protocol at the second peer according to the protocol data (column 23, lines 20-23); and

Art Unit: 2131

Sending a message from the second peer to the first peer according to the tunnel protocol (column 23, lines 20-23).

21. With respect to claim 15, Nessett et al. disclose a method further comprising:

Selecting a second tunnel protocol at the second peer (column 26, lines 18-21); and

Sending a second message from the second peer to the first peer according to the second tunnel protocol (column 26, lines 18-21).

22. With respect to claim 16, Nessett et al. disclose a lookup service in a network comprising:

A first tunnel module that acquires communication data of an associated network peer that is connected to a first network, wherein the first tunnel module facilitates communication between the network peers and an internetwork; (column 12, lines 67 to column 13, lines 1-7; column 15, lines 63-67);

A registration table that stores the communication data and that is accessible via the internetwork (column 12, lines 67 to column 13, lines 1-7); and -

A second tunnel module that sends a communication request to the registration table, acquires the communication data from the registration table, and sends a communication attempt to the first tunnel based on the communication data (column 26, lines 18-21; column 13, lines 54-57; column 23, lines 3-5; column 22, lines 42-51; column 23, lines 20-23).

Art Unit: 2131

23. With respect to claim 17, Nessett et al. disclose a lookup service further comprising a discovery module that acquires the communication data (column 12, lines 67 to column 13, lines 1-7).

24. With respect to claim 18, Nessett et al. disclose a lookup service further comprising a registration module that registers the communication data with the registration table (column 12, lines 67 to column 13, lines 1-7).

25. With respect to claim 19, Nessett et al. disclose a lookup service wherein the communication data includes at least one of a logic name, a unique identifier, a communication address, a port, a communication protocol, and service capabilities (column 12, lines 67 to column 13, lines 1-7).

26. With respect to claim 20, Nessett et al. disclose a lookup service wherein the communication request includes a certificate indicative of the second tunnel module (column 31, lines 47-67 to column 32, lines 1-10).

27. With respect to claim 21, Nessett et al. disclose a lookup service wherein the registration table sends a tunnel identifier to the second tunnel in response to the certificate (column 31, lines 47-67 to column 32, lines 1-10).

28. With respect to claim 22, Nessett et al. disclose a lookup service wherein the communication attempt includes the tunnel identifier (column 31, lines 47-67 to column 32, lines 1-10).

Art Unit: 2131

29. With respect to claim 23, Nessett et al. disclose a lookup service wherein the first tunnel verifies the tunnel identifier with the registration table and accepts the communication attempt (column 31, lines 47-67 to column 32, lines I-10).

30. With respect to claim 36, Nessett et al. disclose a lookup service wherein the second tunnel module selects a tunnel protocol for the communication attempt according to the communication protocol (column 23, lines 20-23).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

32. Claims 9, 11, 24-33 and 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Nessett et al. (U.S. Patent 6,055,236) in view of Birrell et al. (U.S. Patent 5,805,803).

33. Nessett et al. and Birrell et al. are analogous art because both are in the field of secure electronic communication.

34. With respect to claim 24, Nessett et al. disclosed the limitations of claim 16, upon which claim 24 is dependent. Nessett et al. do not disclose a lookup service wherein the first and second

Art Unit: 2131

tunnels include a cache. Birrell et al, disclose a lookup service wherein the first and second tunnels include a cache (item 143: It is inherent in a proxy server to have a message cache or queue.).

35. It would have been obvious for one of ordinary skill in the art at the time of the invention to have combined the teachings of Birrell et al. with the teachings of Nessett et al. because it is well-known in the art to use a proxy server to intercept messages to provide security and caching to a network system (http://www.wcape.school.za/handbook/tcpip2.htm#Proxy_servers).

36. With respect to claim 25, Nessett et al. do not disclose a wherein the cache stores the communication data.

Birrell et al. disclose a lookup service wherein the cache stores the communication data (item 143: It is inherent in a proxy server to have a message cache of the recent messages that have been sent or received, and the communication data is sent and received by network devices that use the proxy server as a go-between. As disclosed above, the communication data is retrieved from the registration table where it is stored.).

37. The motivation for combining the teachings of Birrell et al. and Nessett et al. have been disclosed above.

38. With respect to claim 26, Nessett et al. do not disclose a wherein the cache retrieves the communication data from the registration table. Birrell et al. disclose a lookup service wherein the cache retrieves the communication data from the registration table (item 143: It is inherent in a proxy server to have a message cache of the recent messages that have been sent or received, and the communication data is sent and received by network devices that use the proxy server as a go-between. As disclosed above, the communication data is retrieved from the registration table where it is stored.).

39. The motivation for combining the teachings of Birrell et al. and Nessett et al. have been disclosed above.

40. With respect to claim 27, Nessett et al. disclosed the limitations of claim 16, upon which claim 27 is dependent. Nessett et al. do not disclose a lookup service further comprising a message queue. Birrell et al. disclose a lookup service further comprising a message queue (item 143: It is inherent in a proxy server to have a message cache or queue).

41. It would have been obvious for one of ordinary skill in the art at the time of the invention to have combined the teachings of Birrell et al. with the teachings of Nessett et al. because it is well-known in the art to use a proxy server to intercept messages to provide security and caching to a network system ([http://www.wcape.school.za/handbook/tcpip2.htm#Proxy servers](http://www.wcape.school.za/handbook/tcpip2.htm#Proxy%20servers)).

Art Unit: 2131

42. With respect to claim 28, Nessett et al. do not disclose a lookup service wherein the message queue is a proxy queue. Birrell et al. disclose a lookup service wherein the message queue is a proxy queue (item 143: It is inherent in a proxy server to have a message cache or queue).

43. The motivation for combining the teachings of Birrell et al. and Nessett et al. have been disclosed above.

44. With respect to claim 29, Nessett et al. do not disclose a lookup service wherein the message queue stores communication attempts.

Birrell et al. disclose a lookup service wherein the message queue stores communication attempts (item 143: A proxy server inherently intercepts messages.).

45. The motivation for combining the teachings of Birrell et al. and Nessett et al. have been disclosed above.

46. With respect to claims 9 and 30, Nessett et al. do not disclose a lookup service wherein the message queue is located remotely from the network peer. Birrell et al. disclose a lookup service wherein the message queue is located remotely from the network peer (item 143, Figure 1: Because the tunnel endpoint contains a proxy server, each tunnel endpoint thus has a message queue.).

Art Unit: 2131

47. The motivation for combining the teachings of Birrell et al. and Nessett et al. have been disclosed above.

48. With respect to claim 31, Nessett et al. do not disclose a lookup service wherein the message queue is located at the first tunnel module. Birrell et al, disclose a lookup service wherein the message queue is located at the first tunnel module (item 143, Figure 1).

49. The motivation for combining the teachings of Birrell et al. and Nessett et al. have been disclosed above.

50. With respect to claim 32, Nessett et al. do not disclose a lookup service wherein the message queue is located at the second tunnel module. Birrell et al. disclose a lookup service wherein the message queue is located at the second tunnel module (item 143, Figure 1: Because the tunnel endpoint contains a proxy server, each tunnel endpoint thus has a message queue.).

51. The motivation for combining the teachings of Birrell et al. and Nessett et al. have been disclosed above.

52. With respect to claim 33, Nessett et al. do not disclose a lookup service further comprising a message queue server that creates the message queue. Birrell et al, disclose a lookup service further comprising a message queue server that creates the message queue (item 143: It is inherent in a proxy server to have a message cache or queue, Figure 1).

53. The motivation for combining the teachings of Birrell et al. and Nessett et al. have been disclosed above.

54. With respect to claims 11 and 35, Nessett et al. do not disclose a lookup service wherein the registration table tracks the location of the message queue by storing a location of the message queue.

Birrell et al. disclose a lookup service wherein the registration table tracks the location of the message queue by storing a location of the message queue (column 12, lines 67 to column 13, lines 1-7; column 15, lines 63-67: The table stores the locations of each device on the network, of which the proxy server is one device.).

55. The motivation for combining the teachings of Birrell et al. and Nessett et al. have been disclosed above.

56. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nessett et al. (U.S. Patent 6,055,236) and Birrell et al. (U.S. Patent 5,805,803) in view of Mei et al. ("Turning an HTTP Proxy Server into a Wireless Internet Gateway").

57. Nessett et al., Birrell et al. and Mei et al. are analogous art because both are in the field of secure electronic communication.

58. With respect to claim 34, Nessett et al. and Birrell et al. do not disclose a lookup service wherein the message queue server creates the message queue at a request from the network peer. Mei et al. disclose a lookup service wherein the message queue server creates the message queue at a request from the network peer (Section 2.1).

59. It would have been obvious to have combined the teachings of Mei et al. with the combined teachings of Nessett et al. and Birrell et al. because it is well-known in the art at the time of the invention that proxy server caches are operated this way and HTTP proxies are the most effective and adopted way to reduce response times of servers (Section 2.1).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2131

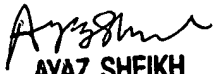
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Zia whose telephone number is 571-272-3798. The examiner can normally be reached on 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SZ
October 16, 2005


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100